February 20, 2004

MEMORANDUM TO: William D. Travers
Executive Director for Operations

FROM: J. E. Dyer, Director ***/RA/ R. W. Borchardt for***
Office of Nuclear Reactor Regulation

Ashok C. Thadani, Director ***/RA/ J. Strosnider for***
Office of Nuclear Regulatory Research

SUBJECT: SEMIANNUAL REPORT - STATUS OF IMPLEMENTATION OF DAVIS-BESSE LESSONS LEARNED TASK FORCE REPORT RECOMMENDATIONS

By memorandum dated March 7, 2003, the Office of Nuclear Reactor Regulation and the Office of Nuclear Regulatory Research submitted an overall plan to implement the recommendations of the Davis-Besse Lessons Learned Task Force (LLTF). The overall plan contains four separate action plans to address, as a minimum, the high-priority items in the areas of: (1) Stress Corrosion Cracking (SCC); (2) Operating Experience; (3) Inspection, Assessment, and Project Management; and (4) Barrier Integrity Requirements. The remaining lower-priority items are being addressed through the agency's Planning, Budgeting, and Performance Management (PBPM) process. The overall plan also requires semiannual reports that provide the status of implementation of all LLTF recommendations and identify changes to the action plans.

This is the second status report, which covers the period from September 2003 to February 2004. Attachment 1 to this memorandum provides the current status of implementation of all Davis-Besse LLTF Report recommendations. Attachment 2 provides the latest update of the action plan milestones. All high-priority activities scheduled for this period were completed. Several lower-priority items were also completed, but some were rescheduled as work progressed, based on changes in the projected work scope, availability of resources, and the need to integrate these activities with other emerging work.

The following discussion summarizes the major activities during this report period.

1. Assessment of Stress Corrosion Cracking

During this period, activities related to Reactor Pressure Vessel (RPV) Head Inspection Requirements included continued monitoring of licensee outage inspection results pursuant to Order EA-03-009, following up with plants discovering defects, and evaluating requests for alternatives to the Order. Common issues in numerous approved relaxation requests led to a revision to the Order that was issued in February 2004. The revised Order reduced some inspection requirements while maintaining adequate protection, and will result in a reduction in burden on licensees and more efficient use of NRC resources.

Development of a plan and technical basis for incorporating the inspection requirements of Order EA-03-009 into Title 10 of the *Code of Federal Regulations*, Section 50.55a was deferred to allow the staff to concentrate on evaluating the results of current inspections, to process a change to the Order, and to develop additional generic communications that address emerging issues, such as leakage in pressurizer nozzles. The interim inspection guidelines continue to provide adequate protection. We expect to submit a rulemaking plan for Commission approval by June 2004. The rulemaking process is expected to take approximately 2 years.

The staff will also continue to interact with the industry on the industry's proposed inspection guidelines. The staff will review the proposed guidelines and associated technical basis, when submitted. These are anticipated to form the basis for changes to the American Society of Mechanical Engineers (ASME) Code inspection requirements.

The staff also evaluated licensee responses to Bulletin 2003-02, "Leakage from Reactor Pressure Vessel Lower Head Penetrations and Reactor Coolant Pressure Boundary Integrity," which was issued in August 2003. The staff also reviewed licensee reports of inspection of reactor vessel lower head penetrations during fall refueling outages.

2. Assessment of Operating Experience

During this period, the interoffice Operating Experience Task Force, under the guidance of an executive Steering Committee, completed its comprehensive assessment of the agency's operating experience function and documented its recommendations in a report to the Steering Committee in November 2003. The Steering Committee forwarded the report to line management in January 2004 with instructions to develop an implementation plan. Due to the extent of the report, which contains 24 discrete recommendations, the target date for the implementation plan was moved from January 2004 to April 2004 to provide the additional time needed to develop an adequate plan. The plan will consider increasing resource allocation in order to complete the implementation by the December 2004 target date.

A separate task force has been addressing the medium-priority recommendation to conduct a follow-on verification of licensee actions in response to previous generic communications. The task force performed an initial screening of previous generic communications, and narrowed the scope of the review to five focus areas. The plan for performing the verification will be reviewed and approved by the NRR Leadership Team.

3. Evaluation of Inspection, Assessment, and Project Management Guidance

The scheduled high-priority recommendations included in the action plan were completed. Inspection program guidance was revised to provide more focused inspections and follow-up to long-standing equipment issues. Program guidance was enhanced regarding NRC oversight of plants in extended shutdowns. Enhancements to inspector training included implementation of a new "read and sign" training program. Training modules were developed for boric acid corrosion, stress corrosion cracking, and the importance of maintaining a questioning attitude. Guidance to ensure there is adequate documentation when accepting deviations from generic communication recommendations was issued, and a follow-up effectiveness review is in progress.

A task force has been addressing the medium-priority recommendation to perform an effectiveness review of actions taken in response to past lessons-learned reviews. A report summarizing the results of their evaluation is scheduled to be issued in April 2004.

4. Assessment of Barrier Integrity Requirements

With regard to the assessment of improvements in leakage detection and monitoring, there were no milestones scheduled for completion in this report period. However, there are several studies in progress (e.g., reevaluating the basis for Reactor Coolant System leakage requirements and examining the capabilities of various leakage detection systems), which are targeted for completion during 2004. This research is being conducted through the Barrier Integrity Research Program initiated at the Argonne National Laboratory.

No milestones regarding development of improved barrier integrity performance indicators were scheduled for completion in this period.

Attachments: 1. Status of LLTF Recommendations
2. Action Plan Milestone Tables

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Attachments: 1. Status of LLTF Recommendations
2. Action Plan Milestone Tables

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SEMIANNUAL REPORT - STATUS OF IMPLEMENTATION OF DAVIS-BESSE LESSONS LEARNED TASK FORCE REPORT RECOMMENDATIONS

Dated: February 20, 2004

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Status of Davis-Besse LLTF Recommendations DRAFT 2/17/04

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
1. Assessment of Stress Corrosion Cracking					
3.1.1(1)	*Assemble foreign and domestic information concerning Alloy 600 (and other nickel based alloys) nozzle cracking and boric acid corrosion. Analyze nickel based alloy nozzle susceptibility to stress corrosion cracking (SCC), including other susceptible components, and boric acid corrosion of carbon steel, and propose a course of action and an implementation schedule to address the results.*	High	RES(DET)	10/04	Addressed in SCC Action Plan. Collection of information on cracking is in progress and expected to complete by 03/04 Collection of information on boric acid corrosion will commence in spring 2004 and is targeted for completion by 10/04
3.3.2(1)	*Develop inspection guidance for the periodic inspection of PWR plant boric acid corrosion control programs.*	High	NRR(IIPB)	03/04	Addressed in SCC Action Plan. TI 152, issued in 11/03, provides interim inspection guidance for follow-up to Bulletin 2003-02, which includes BACC programs. IP71111.08 (Inservice Inspection Activities) to be revised.
3.2.2(1)	*Inspect the adequacy of PWR plant boric acid corrosion control programs.*	High	NRR (IIPB)	03/04	Addressed in SCC Action Plan. Inspections will commence upon issuance of guidance. A follow-up evaluation of adequacy of inspection guidance will be done after first year of inspections.

ATTACHMENT 1

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3.3.4(3)	*Develop inspection guidance or revise existing guidance to ensure that VHP nozzles and the RPV head area are periodically reviewed by the NRC during licensee ISI activities.*	High	NRR (IIPB)	03/04	Addressed in SCC Action Plan. TI 150, issued 08/03, provides interim inspection guidance for follow-up to Order EA-03-009. IP71111.08 (Inservice Inspection Activities) to be revised.
3.3.4(8)	*Encourage ASME Code requirement changes for bare metal inspections of nickel based alloy nozzles for which the code does not require the removal of insulation for inspections. Also, encourage ASME Code requirement changes for the conduct of non-visual NDE inspections of VHP nozzles.*	High	NRR(DE)	TBD	Addressed in SCC Action Plan. Staff will review EPRI/MRP guidelines (MRP-55 and MRP-75), which are expected to form the basis for ASME code changes, when issued. Issuance has been delayed several times. Date will be established when proposed guidelines are issued. NRC management has communicated with industry to encourage timely issuance of proposed guidelines. NRC Staff participates in ASME Code committees.
	Alternatively, revise 10 CFR 50.55a to address these areas.			06/06	NRC will proceed with rulemaking to incorporate EA-03-009 guidelines into 10 CFR 50.55a. A rulemaking plan will be prepared by 06/04. Rulemaking is expected to take about 2 years.
3.1.4(1)	*Determine if it is appropriate to continue using the existing SCC models as a predictor of VHP nozzle PWSCC susceptibility.*	Medium	RES	07/03 Complete	Addressed in SCC Action Plan. Report issued. ML032461221

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3.3.7(6)	*Determine whether ISI summary reports should be submitted to the NRC, and revise the ASME submission requirement and staff guidance regarding disposition of the reports, as appropriate.*	Low	NRR (DE)	TBD	Addressed in SCC Action Plan. Will be included in ASME code revisions per 3.3.4(8) above.

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
2.	**Assessment of Operating Experience, Integration of Operating Experience into Training, and Review of Program Effectiveness**				
3.1.6(1)	*Take the following steps to address the effectiveness of programs involving the review of operating experience: (1) evaluate the agency's capability to retain operating experience information and to perform longer-term operating experience reviews; (2) evaluate thresholds, criteria, and guidance for initiating generic communications; (3) evaluate opportunities for additional effectiveness and efficiency gains stemming from changes in organizational alignments (e.g., a centralized NRC operational experience "clearing house"); (4) evaluate the effectiveness of the Generic Issues Program; and (5) evaluate the effectiveness of the internal dissemination of operating experience to end users.*	High	NRR (IROB) and RES	09/03 Complete	Addressed in Operating Experience Action Plan. Evaluations are complete. Operating Experience Task Force (OETF) completed development of program objectives and attributes and received management endorsement (05/03). ML031350156 OETF submitted specific program improvement recommendations to executive steering committee in 11/03. ML033350063. Steering Committee forwarded to line management for implementation in 01/04. ML040080005.
3.1.6(2)	*Update NRC operating experience guidance documents.*	High	NRR (IROB) and RES	12/04	Addressed in Operating Experience Action Plan. Implementation plan to be developed by 04/04.
3.1.6(3)	*Enhance the effectiveness of NRC processes for the collection, review, assessment, storage, retrieval, and dissemination of foreign operating experience.*	High	NRR (IROB) and RES	12/04	Addressed in Operating Experience Action Plan. Implementation plan to be developed by 04/04.

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3.2.4(1)	*Assess the scope and adequacy of requirements governing licensee review of operating experience.*	High	NRR (IROB)	09/03 Complete	Addressed in Operating Experience Action Plan. Completed 11/03. Addressed in Section 5 of the OETF report.
3.3.4(2)	*Strengthen inspection guidance pertaining to the periodic review of operating experience.*	High	NRR (IROB, IIPB)	12/04	Addressed in Operating Experience Action Plan. To be accomplished in conjunction with 3.1.6 (2) above.
3.3.1(1)	*Provide training and reinforce expectations to NRC managers and staff members to address the following areas: (1) maintaining a questioning attitude in the conduct of inspection activities; (2) developing inspection insights stemming from the DBNPS event relative to symptoms and indications of RCS leakage; (3) communicating expectations regarding the inspection follow-up of the types of problems that occurred at DBNPS; and (4) maintaining an awareness of surroundings while conducting inspections. Training requirements should be evaluated to include the appropriate mix of formal training and on-the-job training commensurate with experience. Mechanisms should be established to perpetuate these training requirements.*	High	NRR (IIPB)	12/03 Complete	Addressed in Operating Experience Action Plan. A web-based training process was initiated, by which inspectors log on and conduct self-paced training. A record of personnel who complete the training is available for management review and follow-up. Training modules onrecommended topics were issued on the system. Training modules will be updated and new ones added, as needed.
3.3.5(1)	*Maintain expertise in the subject areas by ensuring that NRC inspector training includes: (1) boric acid corrosion effects and control; and (2) PWSCC of nickel based alloy nozzles.*	High	NRR (IIPB)	12/03 Complete	Addressed in Operating Experience Action Plan. See above comments on web-based training.

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3.1.2(1)	*Revise NRC processes to require short-term and long-term follow-on verification of licensee actions to address significant generic communications (i.e., bulletins and GLs).*	Medium	NRR (IROB)	TBD	Target date to be set upon completion of generic communication review [3.1.2(5)].
3.1.2(2)	*Establish review guidance for accepting owners group and industry resolutions for generic communications and generic issues.*	Medium	NRR (DLPM, DE, DSSA)	~~12/03~~ 06/04	NRR Office Instructions LIC-100, LIC-101 and LIC-105 will be revised to provide specific guidance on use of owners' group commitments in licensing activities.
3.2.3(1)	*Review a sample of NRC safety evaluations of owners' group submissions to identify whether intended actions that supported the bases of the NRC's conclusions were effectively implemented.*	Medium	NRR (DLPM, IIPB)	12/04	
3.2.3(2)	*Develop general inspection guidance for the periodic verification of the implementation of owners groups' commitments made on behalf of their members.*	Medium	NRR (DLPM, IIPB)	12/04	DLPM Handbook section on "Site Visits" provides instructions to PMs for periodic review of commitments. Also, IP 71005 (issued 08/03) provides a mechanism for PMs to obtain Region inspector support in obtaining plant information.
3.1.2(5)	*Conduct follow-on verification of licensee actions associated with a sample of other significant generic communications, with emphasis on those involving generic communication actions that are primarily programmatic in nature.*	Medium	NRR (IROB, IIPB)	11/04	A task force performed a screening process of candidate generic communications in 07/03 using criteria approved by management. Selection of generic communications and focus areas was completed in 11/03 following management review and input on priorities. Verification plan presented to NRR LT in 12/03, and currently being revised.

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3.1.3(2)	*Conduct follow-on verification of licensee actions pertaining to a sample of resolved GIs.*	Medium	NRR (DLPM, IIPB)	12/04	
3.1.2(3)	*Establish process guidance to ensure that generic requirements or guidance are not inappropriately affected when making unrelated changes to processes, guidance, etc. (e.g., deleting inspection procedures that were developed in response to a generic issue).*	Low	NRR (IIPB)	12/03 Complete	IMC 0040, "Preparing, Revising and Issuing Documents fo the NRC Inspection Manual" was revised in 02/04.
3.1.3(1)	*Evaluate, and revise as necessary, the guidance for proposing candidate GIs.*	Low	RES	10/04	MD 6.4 to be revised.
3.3.4(7)	*Reassess the basis for the cancellation of the inspection procedures that were deleted by Inspection Manual Chapter, Change Notice 01-017 to determine whether there are deleted inspection procedures that have continuing applicability. Reactivate such procedures, as appropriate.*	Low	NRR (IIPB)	~~12/03~~ 03/05	Review of canceled procedures in progress. Additional time added because the scope of the review exceeds the original projection.

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3. Evaluation of Inspection, Assessment, and Project Management Guidance					
3.2.5(2)	*Revise inspection guidance to provide assessments of: (1) the safety implications of long-standing, unresolved problems; (2) corrective actions phased in over several years or refueling outages; and (3) deferred modifications.*	High	NRR (IIPB)	12/03 Complete	Addressed in Inspection Program Action Plan. IP 71152 (Problem Identification and Resolution) was revised in 09/03.
3.3.5(4)	*Develop guidance to address the impacts of IMC 0350 implementation on the regional organizational alignment and resource allocation.*	High	NRR (IIPB)	12/03 Complete	Addressed in Inspection Program Action Plan. Evaluation completed 10/03 (ML033010385). IMC 0350 revision issued in 12/03.
3.3.7(2)	*Establish guidance to ensure that decisions to allow deviations from agency guidelines and recommendations issued in generic communications are adequately documented.*	High	NRR (DLPM)	12/03 Complete	Addressed in Inspection Program Action Plan. Guidance issued through DLPM Handbook update in 02/03, and a training package distributed to NRR via NRR web site and by EDO memo to other offices and regions in 04/03. Followup to assess effectiveness of training materials will be done in 2004.
APP. F	*Conduct an effectiveness review of the actions taken in response to past lessons-learned reviews.*	Medium	NRR (IIPB)	~~02/04~~ 04/04	Task force conducting review.

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3.3.4(5)	*Review the range of NRC baseline inspections and plant assessment processes, as well as other NRC programs, to determine whether sufficient programs and processes are in place to identify and appropriately disposition the types of problems experienced at DBNPS. Additionally, provide more structured and focused inspections to assess licensee employee concerns programs and safety conscious work environment.*	Medium	NRR (IIPB)	12/04	
3.2.5(1)	*Develop inspection guidance to assess scheduler influences on outage work scope.*	Medium	NRR (IIPB)	12/03 Complete	Procedure 71111.15 (Operability Evaluations) was revised in 02/04.
3.3.1(2)	*Develop inspection guidance to assess repetitive or multiple TS action statement entries, as well as, the radiation dose implications associated with repetitive tasks.*	Medium	NRR (IIPB)	~~12/03~~ 03/04	IP 71152 (Problem Identification and Resolution) was revised in 09/03. IMC 2515, App. D ("Plant Status") to be revised.
3.3.3(1)	*As an additional level of assurance, identify alternative mechanisms to independently assess plant performance as a means of self-assessing NRC processes. Once identified, the feasibility of such mechanisms should be determined.*	Medium	NRR (IIPB and EDO)	12/04	

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3.3.7(1)	*Reinforce expectations for the implementation of guidance in the PM handbook for PM site visits, coordination between PMs and resident inspectors, and PM assignment duration. Reinforce expectations provided to PMs and their supervisors regarding the questioning of information involving plant operation and conditions. Also, strengthen the guidance related to the license amendment review process to emphasize the need to consider current system conditions, reliability, and performance data in SERs. In order to improve the licensing decision-making process, the NRC should strengthen its guidance regarding the verification of information provided by licensees.*	Medium	NRR (DLPM)	~~12/03~~ 03/04	DLPM Handbook "Site Visits" section provides guidance to PMs on activities to be conducted during site visits. The "Morning Calls" section discusses interactions with Region personnel. Office Instruction LIC-100, Rev. 1 (issued 01/04) provides guidance on considering current conditions during licensing action reviews. Ofice Instruction LIC-101 provides guidance on the amendment review process and use of RAIs for obtaining information. IP 71005 (issued 08/03) provides a mechanism for PMs to obtain Region inspector support in obtaining plant information.

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3.3.4(1)	*Review inspection guidance pertaining to refueling outage activities to determine whether the level of inspection effort and guidance are sufficient given the typically high level of licensee activity during relatively short outage periods. The impact of extended operating cycles on the opportunity to inspect inside containment and the lack of inspection focus on passive components should be reviewed. This review should also determine whether the guidance and level of effort are sufficient for inspecting other plant areas which are difficult to access or where access is routinely restricted.*	Medium	NRR (IIPB)	~~12/03~~ 08/04	IP 71111.20 (Refueling and Other Outage Activities) was revised in 11/03. Additional changes to be made.
3.3.4(4)	*Revise IMC 0350 to permit implementation of IMC 0350 without first having established that a significant performance problem exists, as defined by the ROP.*	Medium	NRR (IIPB)	10/03 Complete	IMC 0350 revised 12/31/03.
3.3.2(2)	*Revise the overall PI&R inspection approach such that issues similar to those experienced at DBNPS are reviewed and assessed. Enhance the guidance for these inspections to prescribe the format of information that is screened when determining which specific problems will be reviewed.*	Low	NRR (IIPB)	12/03 Complete	Addressed in Inspection Program Action Plan. IP 71152 (Problem Identification and Resolution) was revised in 09/03.
3.3.2(3)	*Provide enhanced Inspection Manual Chapter guidance to pursue issues and problems identified during plant status reviews.*	Low	NRR (IIPB)	12/03 Complete	Addressed in Inspection Program Action Plan. IP 71152 (Problem Identification and Resolution) was revised in 09/03.

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3.3.2(4)	*Revise inspection guidance to provide for the longer-term follow-up of issues that have not progressed to a finding.*	Low	NRR (IIPB)	12/03 Complete	Addressed in Inspection Program Action Plan. I P 71152 revised in 09/03.
3.3.3(2)	*Perform a sample review of the plant assessments conducted under the interim PPR assessment process (1998-2000) to determine whether there are plant safety issues that have not been adequately assessed.*	Low	NRR (IIPB)	03/04	
3.3.4(6)	*Provide ROP refresher training to managers and staff members.*	Low	NRR (IIPB)	~~12/03~~ 06/04	Planning being done by Training
3.3.5(2)	*Reinforce IMC 0102 expectations regarding regional manager visits to reactor sites.*	Low	NRR (IIPB)	12/03 Complete	Discussed at DRP/DRS counterparts meeting in July 2003. E-mail sent to all Division Directors.
3.3.5(3)	*Establish measurements for resident inspector staffing, including the establishment of program expectations to satisfy minimum staffing levels.*	Low	NRR (IIPB)	~~12/03~~ 12/04	Metrics were developed in 12/03. ML032410588. Date extended to allow data collection for one annual ROP cycle to establish minimum staffing levels.
3.3.7(5)	*Fully implement Office Letter 900, "Managing Commitments Made by Licensees to the NRC," or revise the guidance if it is determined that the audit of licensee's programs is not required.* *Further, determine whether the periodic report on commitment changes submitted by licensees to the NRC should continue to be submitted and reviewed.*	Low	NRR (DLPM)	05/03 Complete	OL 900 implemented by isuance of NRR Office Instruction LIC-105. Reports will continue to be submitted. Instructions for review are in LIC-105.

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
4. Assessment of Barrier Integrity Requirements					
3.2.1(1)	*Improve the requirements pertaining to RCS unidentified leakage and RCPB leakage to ensure that they are sufficient to: (1) provide the ability to discriminate between RCS unidentified leakage and RCPB leakage; and (2) provide reasonable assurance that plants are not operated at power with RCPB leakage.*	High	RES(DET)	TBD	Addressed in Barrier Integrity Action Plan. Report by Argonne Lab due 07/04. Additional actions will be scheduled after review of report..
3.1.5(1)	*Determine whether PWR plants should install on-line enhanced leakage detection systems on critical plant components, which would be capable of detecting leakage rates of significantly less than 1 gpm.*	High	RES(DET)	03/05	Addressed in Barrier Integrity Action Plan. Report by Argonne Lab due 07/04. Additional actions will be scheduled after review of report..
3.2.1(2)	*Develop inspection guidance pertaining to RCS unidentified leakage that includes action levels to trigger increasing levels of NRC interaction with licensees in order to assess licensee actions in response to increasing levels of unidentified RCS leakage. The action level criteria should identify adverse trends in RCS unidentified leakage that could indicate RCPB degradation.*	High	NRR(IIPB)	01/05	Addressed in Barrier Integrity Action Plan.
3.3.3(3)	*Continue ongoing efforts to review and improve the usefulness of the barrier integrity PIs. These review efforts should evaluate the feasibility of establishing a PI which tracks the number, duration, and rate of primary system leaks that have been identified but not corrected.*	High	RES (DRAA)	12/05	Addressed in Barrier Integrity Action Plan.

LLTF No.	LLTF Recommendation	Priority	Lead Org.	Target Date	Status
3.2.1(3)	*Inspect plant alarm response procedure requirements for leakage monitoring systems to assess whether they provide adequate guidance for the identification of RCPB leakage.*	High	NRR (IIPB)	03/05	Addressed in Barrier Integrity Action Plan. IP 71111.22 to be revised by 08/04. Inspections will be done after that.
3.3.4(9)	*Review PWR plant TS to identify plants that have non-standard RCPB leakage requirements.* *Pursue changes to those TS to make them consistent among all plants.*	High	NRR (IROB)	TBD	Addressed in Barrier Integrity Action Plan. Plants with nonstandard TS were identified in a 07/03 study (ML031980077). TS changes will be coordinated with other changes in leakage requirements.
3.3.7(3)	*Evaluate the adequacy of analysis methods involving the assessment of risk associated with passive component degradation, including the integration of the results of such analyses into the regulatory decision making process.*	Medium	RES	TBD	Deferred due to budget constraints and higher priority work.

DAVIS-BESSE LLTF ACTION PLAN

MILESTONE TABLES

ATTACHMENT 2

DAVIS-BESSE LESSONS LEARNED TASK FORCE
RECOMMENDATIONS REGARDING STRESS CORROSION CRACKING

Last Update: 02/17/04
Lead Division: DLPM
Supporting Divisions: DE, DSSA, DIPM, & DRIP
Supporting Offices: RES & Regions

	Milestone	Date (T=Target) (C=Complete)	Lead	Support
Part I - Reactor Pressure Vessel Head Inspection Requirements				
5.	Collect and summarize information available worldwide on Alloy 600, Alloy 690 and other nickel based alloy nozzle cracking for use in evaluation of revised inspection requirements. [LLTF 3.1.1(1)-High]	03/04 (T)	RES/DET	DE
6.	Critically evaluate existing SCC models with respect to their continuing use in the susceptibility index. [LLTF 3.1.4(1)-Medium]	07/03 (C) ML032461221 ML032461224	RES/DET	DE
7.	a. Complete initial evaluation of individual plant inspections in response to Bulletins and Orders.	05/04 (T)	DE	DLPM Regions
	b. Continue to review future inspection results until permanent guidelines are issued.	Ongoing	DE	DLPM Regions
8.	Incorporate Order EA-03-009 requirements into 10 CFR 50.55a 1. Develop rulemaking plan 2. Publish proposed rule 3. Evaluate/incorporate public comments and publish final rule.	Note (2) 06/04 (T) 06/05 (T) 06/06 (T)	DE	DRIP DSSA DLPM
9.	Monitor and provide input to industry efforts to develop revised RPV Head inspection requirements (ASME Code Section XI). [LLTF 3.3.4(8)-High LLTF 3.3.7(6)-Low]	TBD Note (1)	DE	RES/DET DSSA Regions Industry

	Milestone	Date (T=Target) (C=Complete)	Lead	Support
10.	Participate in meetings and establish communications with appropriate stakeholders (e.g., MRP, ASME). [LLTF 3.3.4(8)-High]	Ongoing	DE	RES/DET DLPM DRIP DSSA industry
11.	Review and evaluate revised ASME Code requirements when issued. [LLTF 3.3.4(8)-High]	TBD Note (1)	DE	RES/DET
12.	If revised ASME Code requirements are acceptable, establish schedule to incorporate by reference into 10 CFR 50.55a. [LLTF 3.3.4(8)-High]	TBD Note (1)	DE	DRIP DIPM DSSA RES/DET industry public
Part II - Boric Acid Corrosion Control				
1.	Collect and summarize information available worldwide on boric acid corrosion of pressure boundary materials for use in evaluation of revised inspection requirements. [LLTF 3.1.1(1)-High]	10/04 (T)	RES/DET	DE
2.	a. Evaluate individual plant responses to Bulletin 2002-01 regarding Boric Acid Inspection Programs (60-day responses and necessary follow-up) b. Issue public document to summarize evaluation of plant responses.	06/03 (C) ML031760568 07/03 (C) ML032100653	DE DE	DLPM DLPM DRIP
3.	Participate in meetings and establish communications with appropriate stakeholders (e.g.,MRP, ASME).	Ongoing	DE	RES/DET DLPM DRIP DSSA industry
4.	Evaluate need to take additional regulatory actions and determine appropriate regulatory tool(s).	06/03 (C) ML031760568	DE	DLPM DRIP DIPM DSSA Regions
5.	Issue Bulletin 2003-02 on Reactor Vessel Lower Head inspection	08/03 (C) ML032320153	DE	DLPM
6.	Develop milestones for additional regulatory actions, as necessary.	07/03 (C)	DE	DLPM DSSA DRIP

	Milestone	Date (T=Target) (C=Complete)	Lead	Support
7.	Incorporate revised requirements for inspection of lower head and other RCPB components into 10 CFR 50.55a 1. Develop rulemaking plan 2. Publish proposed rule 3. Evaluate/incorporate public comments and publish final rule.	Note (3) TBD TBD TBD	DE	DRIP DSSA DLPM
8.	Review and evaluate the adequacy of revised ASME Code Requirements for Pressure Testing/Leakage Evaluation being developed by the ASME Code, Section XI, Task Group on Boric Acid Corrosion.	01/05 (T) Note (1)	DE	RES/DET
Part III - Inspection Programs				
1.	Develop inspection guidance or revise existing guidance to ensure that VHP nozzles and the RPV head area are periodically reviewed by the NRC during licensee ISI activities. [LLTF 3.3.4(3)-High]	03/04 (T)	DIPM	DE Regions
2.	Develop inspection guidance that provides for timely, periodic inspection of PWR plant BACC programs. [LLTF3.3.2(1)-High]	03/04 (T)	DIPM	DE Regions
3.	Develop inspection guidance for assessing the adequacy of PWR plant BACC programs (implementation effectiveness, ability to identify leakage, adequacy of evaluation of leaks). [LLTF 3.2.2(1)-High]	03/04 (T)	DIPM	DE RES/DET Regions
4.	Perform follow-up evaluation of inspection guidance after first year of conducting inspections.	03/05	DIPM	DE RES/DET Regions

Notes: (1) Milestone dates are dependent upon issuance of industry proposals.

(2) Requirements for inspection of upper head only will be the subject of this rulemaking.

(3) A rulemaking plan for a comprehensive, performance-based rule will be developed for lower head and other RCPB components. Requirements for upper head inspection may ultimately be included.

DAVIS-BESSE LESSONS LEARNED TASK FORCE RECOMMENDATIONS REGARDING OPERATING EXPERIENCE PROGRAM EFFECTIVENESS

Last Update: 12/31/03
Lead Division: DRIP
Supporting Divisions: DE, DSSA, DIPM, & DLPM
Supporting Offices: RES & Regions

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	Milestone	Date (T=Target) (C=Complete)	Lead	Support
Part I - Operating Experience Program: Objective Phase				
1.	Form Task Force with Steering Committee and develop Charter.	03/03 (C) ML030900117	NRR/RES	
b.	Identify desirable agency operating experience program objectives and attributes, and	04/03 (C)	Task Force	DRIP, DIPM, DLPM, DE, DSSA, DET/RES, DRAA/RES, DSARE/RES, Regions
2.a.	Provide documented staff proposals of operating experience program objectives and attributes.	04/03 (C) ML031200312 ML031490535		
2.b.	Obtain executive management endorsement.	05/03 (C) ML031350156		
Part II - Operating Experience Program: Assessment Phase				
1.	Define functional needs/areas and processes to meet objectives and attributes.	9/03 (C)	Task Force	DRIP, DIPM, DLPM, DE, DSSA, DET/RES, DRAA/RES, DSARE/RES, Regions
2.	Review and evaluate current processes. [LLTF 3.1.6(1)]	9/03 (C)	Task Force	DRIP, DIPM, DLPM, DE, DSSA, DET/RES, DRAA/RES, DSARE/RES, Regions

	Milestone	Date (T=Target) (C=Complete)	Lead	Support
3.	Identify areas for improvements. [LLTF 3.2.4(1)]	09/03 (C)	Task Force	DRIP, DIPM, DLPM, DE, DSSA, DET/RES, DRAA/RES, DSARE/RES, Regions
4.	Task Force issues draft report.	09/03 (C) ML032740058	Task Force	
5.	Task Force provides final report to Steering Committee documenting its specific program improvement proposals.	11/03 (C) ML033350063	Task Force	
6.	Steering Committee sends report to line management for implementation detail.	01/04 (T)	Steering Committee	
6.a	Responsible organizations achieve consensus on proposals to implement.	01/04 (T)	NRR/RES	Regions
Part III - Operating Experience Program: Implementation Phase				
1.	Develop implementation plan based on 6.a in Part II.	04/04 (T)	NRR/RES	Regions
1.	Implement specific improvements per implementation plan (1/04-12/04). [LLTF 3.1.6(2)] [LLTF 3.1.6(3)] [LLTF 3.3.4(2)]	12/04 (T)		
2.	Establish processes to monitor effectiveness.	09/05 (T)	NRR/RES	Regions
Part IV - Inspection Program Enhancements				
1.	Provide training and reinforce expectations to NRC managers and staff members to address the following areas: (1) maintaining a questioning attitude in the conduct of inspection activities; (2) developing inspection insights stemming from the DBNPS event relative to symptoms and indications of RCS leakage; (3) communicating expectations regarding the inspection follow-up of the types of problems that occurred at DBNPS; and (4) maintaining an awareness of	12/03 (C)	DIPM	DE, DSSA, DET/RES, Regions

	Milestone	Date (T=Target) (C=Complete)	Lead	Support
	surroundings while conducting inspections. Training requirements should be evaluated to include the appropriate mix of formal training and on-the-job training commensurate with experience. Mechanisms should be established to perpetuate these training requirements. [LLTF 3.3.1(1)]			
2.	Implement actions to maintain NRC expertise by ensuring that NRC inspector training includes: (1) boric acid corrosion effects and control; and (2) PWSCC of nickel based alloy nozzles. [LLTF 3.3.5(1)]	12/03 (C)	DIPM	DE, DSSA, DET/RES, Regions

DAVIS-BESSE LESSONS LEARNED TASK FORCE RECOMMENDATIONS REGARDING INSPECTION, ASSESSMENT, AND PROJECT MANAGEMENT GUIDANCE

Last Update: 12/31/03
Lead Division: DIPM
Supporting Division: DLPM
Supporting Office: Regions

Milestone	Date (T=Target) (C=Complete)	Lead	Support
Part 1 - Evaluation of Inspection Guidance Related To Problem Identification and Resolution			
The NRC should revise its inspection guidance to provide assessments of: (1) the safety implications of long-standing, unresolved problems; (2) corrective actions phased in over several years or refueling outages; and (3) deferred modifications. [LLTF 3.2.5.(2) High] The NRC should revise the overall PI&R inspection approach such that issues similar to those experienced at DBNPS are reviewed and assessed. The NRC should enhance the guidance for these inspections to prescribe the format of information that is screened when determining which specific problems will be reviewed. [LLTF3.3.2.(2) Low] The NRC should provide enhanced Inspection Manual Chapter guidance to pursue issues and problems identified during plant status reviews [LLTF3.3.2.(3) Low] The NRC should revise its inspection guidance to provide for the longer-term follow-up of issues that have not progressed to a finding. [LLTF3.3.2.(4) Low]			
2. Make changes to IP 71152 to require annual follow-up of three to six issues.	01/02 (C)	DIPM	
2. PI&R focus group assess lessons learned recommendations.	03/03 (C)	DIPM	Regions
3. Develop draft procedure changes based on PI&R group recommendations and provide to regions for review.	04/03 (C) ML031390010	DIPM	Regions
4. Provide training on procedure changes.	09/03 (C)	DIPM	
5. Issue procedure changes.	09/03 (C)	DIPM	

Milestone	Date (T=Target) (C=Complete)	Lead	Support
PART 2 - Evaluation of IMC 0350 Guidance			
The NRC should develop guidance to address the impacts of IMC 0350 implementation on the regional organizational alignment and resource allocation. [LLTF3.3.5.(4) High]			
1. Assess past and present IMC 0350 data and associated inspection approaches.	06/03 (C) ML031890873	DIPM	Regions
2. Develop enhanced structure to the inspection approach used for IMC 0350 plants.	08/03 (C) ML032250336	DIPM	Regions
3. Develop draft revisions to IMC and issue for regional comment.	09/03 (C)	DIPM	
4. Issue procedure revisions.	12/03 (C)	DIPM	
5. Include estimated resources for IMC 0350 plants into budget cycles.	12/03 (C) ML033010385	DIPM	
Part 3 - Evaluation of Project Management Guidance			
The NRC should establish guidance to ensure that decisions to allow deviations from agency guidelines and recommendations issued in generic communications are adequately documented. [LLTF 3.3.7.(2) High]			
1. The DLPM Handbook will be updated with a new section that addresses documenting staff decisions.	02/03 (C)	DLPM	
2. A training package emphasizing compliance with the requirements of MD 3.53 will be developed and distributed to all Offices and regions.	04/03 (C) ML030300067	DLPM	
3. Follow up with Offices and Regions to determine effectiveness of training.	02/04 (T)	DLPM	

ACTION PLAN FOR ADDRESSING DAVIS-BESSE LESSONS LEARNED TASK FORCE RECOMMENDATIONS REGARDING ASSESSMENT OF BARRIER INTEGRITY REQUIREMENTS

Last Update: 12/31/03
Lead Division: RES/DET
Supporting Divisions: DRAA,DSARE
Supporting Offices: NRR, Regions

	Milestone	Date (T=Target) (C=Complete)	Lead	Support
Part I: Leakage				
1.	Review PWR TS to identify plants that have non-standard RCPB leakage requirements [LLTF 3.3.4(9):High]	7/03 (C) ML031980277	NRR/DRIP	
2.	Review plant alarm response procedure requirements for leakage monitoring systems and assess their adequacy for identification of RCPB leakage [LLTF 3.2.1(3):High]	3/04 (T)	NRR/DIPM	RES/DET
3.	Re-evaluate basis for RCS leakage requirements and assess the capabilities of currently used and state-of-the-art leakage detection systems [LLTF 3.2.1(1):High, 3.1.5(1):High]	7/04 (T)	RES/DET	RES/DRAA RES/DSARE NRR/DSSA NRR/DE NRR/DRIP NRR/DIPM
4.	Develop recommendations for inspection guidance pertaining to RCS unidentified leakage that includes action levels to trigger increasing levels of NRC interaction with licensees in response to increasing levels of unidentified RCS leakage [LLTF 3.2.1(2):High]	1/05 (T)	NRR/DIPM	RES/DET NRR/DE NRR/DSSA

	Milestone	Date (T=Target) (C=Complete)	Lead	Support
5.	Develop recommendations for (1) improving plant procedures for identifying RCPB leakage, (2) consistent TS, and (3) use of on-line, enhanced leakage detection systems on critical components [LLTF 3.1.5(1):High, 3.2.1(1):High, 3.2.1(3):High, 3.3.4(9):High]	3/05 (T)	NRR/DIPM NRR/DRIP RES/DET	NRR/DE RES/DRAA NRR/DSSA NRR/DLPM
6.	Use appropriate regulatory tools to implement improved requirements [LLTF 3.2.1(1):High]	TBD	NRR/DRIP	RES/DRAA RES/DSARE RES/DET NRR/DSSA NRR/DE NRR/DLPM
Part II. Performance Indicators (PI)				
1.	Develop and implement improved barrier integrity PI based on **current** requirements and measurements [LLTF 3.3.3.(3):High]	6/04 (T)	NRR/DIPM	RES/DRAA RES/DET NRR/DE NRR/DSSA Regions
2.	Develop and, if feasible, implement an **additional** PI capable of tracking the number, duration, and rate of primary system leaks. [LLTF 3.3.3.(3):High]	12/05 (T)	NRR/DIPM	RES/DRAA RES/DET NRR/DE NRR/DSSA Regions
3.	Determine feasibility of establishing a risk-informed barrier integrity PI [LLTF 3.3.3.(3):High]	TBD	RES/DRAA	NRR/DIPM NRR/DSSA NRR/DE RES/DET Regions
4.	Evaluate the need to modify existing barrier integrity PI's based on potential **new requirements** for RCS leakage from Part 1 [LLTF 3.3.3.(3):High]	TBD	NRR/DIPM	RES/DRAA RES/DET NRR/DE NRR/DSSA Regions